

to-22. "Metalization" of Liquid Selenium. (In Russian). B. S. Vrayvskii and B. D. Luft. *Zhurnal Fizicheskoi Khimii* (Journal of Physical Chemistry), v. 22, April 1948, p. 409-416.

Transformation into the metallic state of "glassy" selenium in various N-containing organic bases. An abnormality of temperature curves coinciding with an abnormality of electrical conductivity was noted and a hypothesis based on the possible formation of selenide is proposed. 13 ref.

VRBA, A.

"Use of electron tubes in experimental physics" by A.M. Bonc-
Brujevic, Reviewed by A. Vrba. Jemna mech opt 5 no.3:103-104
Mr '60.

KOPACOVA, L. J. VRBA, C.

Studies on local anesthetics. Part 26. Cesk. farm. 1/2 no.6:
322-326 Ag '65.

1. Katedra farmakodynamiky a toxikologie farmaceutické fakulty
Univerzity Komenského, Bratislava a Státní veterinární ústav,
sekcce kontroly léčiv, Brno. Submitted November 14, 1964.

KOPACOVA, L.; VRBA, C.

CSSR

Chair of Pharmacodynamics and toxicology of the pharmaceutical faculty, Komenius University, Bratislava, and State Veterinary Institute, section for the control of veterinary drugs, Brno (Katedra farmakodynamiky a toxikologie farmaceuticke fakulty UK v Bratislave, Statni veterinarni ustav, sekce kontroly veterinarnich lecu v Brno) (for both)

Bratislava, Farmaceuticky Obzor, No 1, 1963, pp 1-6

"A short Summary of Laboratory Methods to Evaluate the Depot-Local Anesthesia"

(2)

VRBA, C. APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001961210015-5

CZECHOSLOVAKIA

VODRAZKA, J., Docent Dr; VRBA, C., Dr; JELINEK, J., Dr.

Kosice (for Vodrazka); Brno (for Vrba); Prague (for Jelinek)

Prague, Veterinarstvi, No 3, 1963, pp 128-129

"Present State of Mass Production of Veterinary Medicines and Further Development in This Direction."

VRBA, C.

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic
Chemistry.

G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Author : Karel Palat, Ales Dekera, Cenek Vrba.

Inst : -

Title : Study of Local Anesthetics. X. Basic Complex
Esters of Diphenylcarbamic Acids.

Orig Pub: Chem listy, 1957, 51, No 3, 563-567; Sb. chekhosl.
khim. rabot, 1957, 22, No 3, 825-830.

Abstract: m-Iodophenylbutyl ester, yield 64%, boiling point
131 to 132°/7 mm, and n-iodophenylbutyl ester,
yield 76%, boiling point 104 to 106°/0.5 mm, were
synthetized of corresponding amines. n-Bromophe-
netole, boiling point 91 to 93°/5mm, was synthetized

Card 1/7

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic
Chemistry.

G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: of the aromatic halogen derivative with 0.15 mole of alkoxyaniline in the presence of 1g of active Cu in the duration of 3 to 6 hours to from 200 to 210° at a periodical addition of fresh catalyst; 2/ by alkylating 0.1 mole of oxy- or dioxydiphenylamine with 0.11 or 0.22 mole of diethylsulfate in the presence of 20%-ual KOH; 3/ by adding the Na salt (prepared by aging Na-alcoholate with 0.1 mole of the corresponding oxydiphenylamine in alcohol solution for 12 hours) to 0.11 mole of butyl iodide and boiling it 3 hours. The R-s and R's constituting the I, the yields by the methods 1, 2, and 3,

Card 3/7

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic
Chemistry.

G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60721.

Abstract: point; acid chlorides of substituted diphenyl-
carbamic acids $RC_6H_4N(C_6H_4R')COCl$ are produced;
the R-s and R'-s, the yield in % and the melting
points in °C (from alcohol) are presented in the
following: 4- C_2H_5O , H, 87, 126 to 127; 4- C_4H_9O ,
H, 86, 62; 4- C_2H_5O , 4- C_2H_5O , 76, 101; 4- C_4H_9O ,
4- C_4H_9O , 76, 78. $RC_6H_4N(C_6H_4R')COCH_2CH_2N(C_2H_5)_2$ -s
(II) were prepared by boiling (1 hour) Na-diethyl-
amineethylate with the corresponding acid chloride.
The R-s and R'-s, the yield in %, the boiling
points in °C/mm, and the melting points of the

Card 5/7

VRBA, C.; LEBDUSKA, J.; SEKERA, A.

Studies on local anesthetics; pharmacological evaluation of active
basic esters of substituted carbamic acids. Cesk. farm. 1 no.10:554-
563 1952. (CML 23:4)

1. Of the Institute of Pharmacology of the Veterinary School and of
the Institute of Pharmaceutical Chemistry of Masaryk University, Brno.

SEREKA, A.; JAKUBEC, I.; KRAL, J.; VRBA, C.

Anesthesia with carbamic acid series preparation. Cas.cesk.lek.
Ved.priloha 63 no.9-12:293-297 Dec 1950. (CIML 20:9)

1. Of the Institute of Pharmaceutical Chemistry of Masaryk
University in Brno and of Institute of Pharmacology of the
Veterinary School in Brno.

KLIMES, B., doc. MVDr.; VRBA, Cenek, MVDr.; DOFEK, Rudolf, PhMr. CSc.;
SLOVACEK, Stanislav, ~~promovaný~~ veterinární lékař

Biologic efficiency of nitrofurazone in relation to the stability
of its aqueous solution. Veter medicina 9 no.1:39-42 Ja '64.

1. Chair of Poultry Diseases, Faculty of Veterinary Medicine, Brno
and State Veterinary Institute, Department of Drug Control.

VIKIŠM, L. enek
C. ENFK, VRDA

Local anesthetics. III. Basic esters of monoalkylcarbamates. Ala Sekera, Alois Boryvanský, and Ceník Váňa (Masarykova Univ., Brno, Czech.). Chem. Listy 47, 111-113 (1952); C. 47, 1202. - 3-Diethylaminoethyl N-alkylcarbamates (I) prepd. from alkyl isocyanates or by the Curtius degradation were inactive as local anesthetics. Some of them showed a slight sedative and hypnotic action upon white mice. Dialkyl sulfates and KOCN gave MeNCO, b. 42-5° (42%), and EtNCO, b. 59-61° (38%). BuI (0.25 mole) refluxed 20-50 hrs. with 45 g. AgOCN in 200 ml. Et₂O gave 30% BuNCO, b. 112-13°; Me(CH₂)₃CH:CH-(CH₂)₃NCO (II), b. 102-3°, was prepd. in 85% yield by boiling 2 hrs. 30 g. Me(CH₂)₃CH:CH(CH₂)₃COCl in 100 ml. C₆H₆ with 13 g. Na₂S. The I were prepd. by refluxing 0.25 mole RNCO 8-10 hrs. with 35.2 g. Et₃NCH₂CH₂OH (III) in 100 ml. Et₂O and distg. the mixt. in vacuo. The bases with HCl gave the HCl salts from Et₂O. Me₂CO. Alkyls, % yields, and b. p. of the I and m. p. of the HCl salts: Me, 62, b. 120°, 117-19°; Et, 77, b. 108°, 110°; *n*-Pr, 20, b. 116°, 113-12°; *iso*-Pr, 21-2°; Bu, 90, b. 128°, 97-9°; *iso*-Bu, 41, b. 111°, 126°; *sec*-Bu, 20, b. 122°, 112-14°; Me₂C, 25, b. 101°, 157°. C₆H₅CHCH₂Br and AgOCN gave CH₂:CHCH₂NCO which yielded 26% CH₂:CHCH₂NHCO₂CH₂CH₂NEt₃, b. 121-3° (HCl salt, m. 126-7°), hydrogenated in EtOH over 20% Pd-C, to a compd. b. 135-40°, the const., with the exception of the b. p., and the infrared spectrum of which agree with those of IV. Heating 5 g. III with 5 g. Me₂CHCH₂CON₂ in Et₂O gave 19% *iso*-BuNHCO₂CH₂CH₂NEt₃, b. 148° (HCl salt, m. 128-8°). Refluxing 8 g. II and 5 g. III 5 hrs. in 30 ml. C₆H₆ gave Me(CH₂)₃CH:CH(CH₂)₃NHCO₂CH₂CH₂NEt₃ (V); HCl salt, m. 103-10° (28% yield). Hydrogenation of V gave C₁₀H₂₁NHCO₂CH₂CH₂NEt₃; HCl salt, m. 116-19° (from pet. ether CHCl₃). M. Hudlický

VRBA, C.; CELADNIK, M.; PALAT, K.

Local anesthetics from the group of basic propiophenones. In German. p. 51.
Vol. 1, 1958.

ACTA FACULTATIS PHARMACEUTICAE BRUNENSIS ET BRATISLAVENSIS. BRNO, Czechoslovakia.
Vol. 1, 1958.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

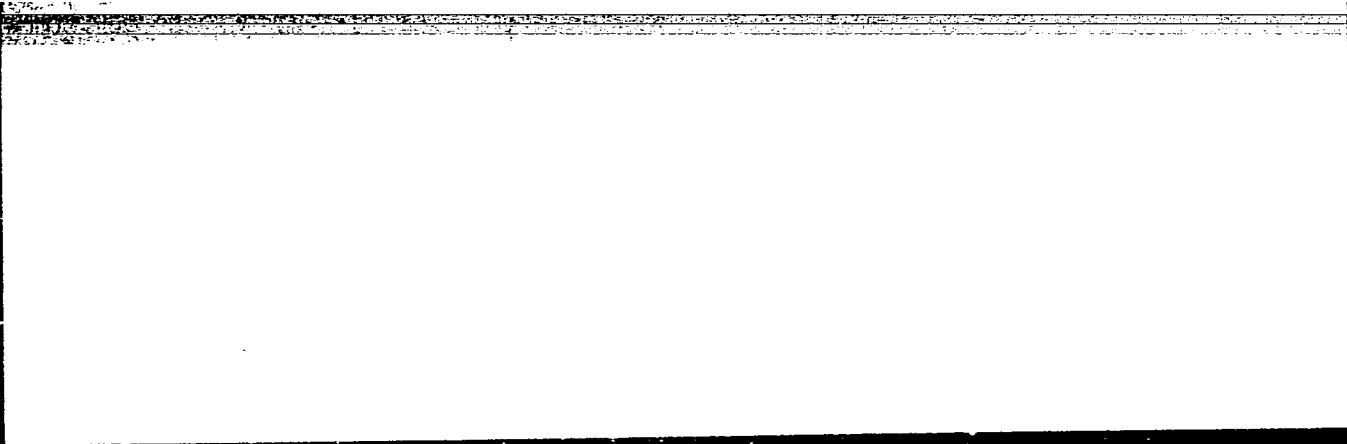
Uncl.

(XII), 86%, m. 173° (from Me₂CO-A OH). The most interesting pharmacol. effect was shown by XI, which was twice as toxic as cocaine, but 50 times as effective in surface anesthesia as cocaine and 70 times as effective as procaine

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CIA-RDP86-00513R001961210015-5"

VRBA
 COUNTRY : Czechoslovakia G-2
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 20 1959, No. 71492
 AUTHOR : Sekera A.; Pavlicek, R.; Vrba, C.
 INST. : Not given
 TITLE : A Study of Local Anesthetics. Article IX.
 Synthesis of Some New β -Alkoxyethoxy-carbanilates and of Aminated β -Alkoxyethoxyinchonamides.
 ORIG. PUB. : Bull Soc chim. France, 1959, #2, 401-404 *
 ABSTRACT : In order to determine the relation between the chemical structure and local anesthetic activity, following substituted carbanilates were synthesized: $RC_6H_4NHCOOCH_2CH_2N(C_2H_5)_2$ (Ia-e, here and subsequently a:
 c: R = o- $C_2H_5OCH_2CH_2O$, d: R = m- $C_2H_5OCH_2CH_2O$, and e: R = p- $C_2H_5OCH_2CH_2O$), analogues of sevicaine bases (II a-b), and also sevicaine (IIc-base). Among I-chlorides the most active were found to be Ia and Ic chlorides, which had activities (surface

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961210015-5"

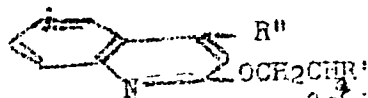
CARD: 1/9

* Ceskosl. farmac., 1958, 7, #8, 448-450.

COUNTRY : Czechoslovakia
 CATEGORY :
 ABST. JOUR. : RZKhim., No. 20 1959, No. 71492
 AUTHOR :
 INST. :
 TITLE :

ORIG. PUB. :

ABSTRACT



II a: R' = OCH₃
 b: R' = OC₂H₅
 c: R' = C₂H₅
 a-t: R'' = CONHCH₂CH₂N(C₂H₅)₂

CH₃OCH₂CH₂Cl (24% yield, b.p. 93°) was synthesized by reacting (CH₃)₂SO₄ with HOCH₂CH₂Cl. The latter when heated for 15 hours with NaI and acetone, gives CH₃OCH₂CH₂I (50% yield, b.p. 137-138°). The reaction of SOCl₂ with C₂H₅OCH₂CH₂OH in the presence of dimethylaniline yields

CARD: 3/9

COUNTRY : Czechoslovakia G-2
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 20 1959, No. 71492
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :
 ABSTRACT : 158/0.05; c, 64, 132/0.1; d, 71, 187/0.75, m.p. 54.50; e, 85, 172/0.25, m.p. 720; 1Va, 78, 110/0.16; b, 71, 112/0.11; c, 72, 93/0.05; d, 59, 110/0.05; e, 86, 101, 0.1; Va, 65, 82/0.07; b, 82, 91/0.11; c, 71, 90/0.21; d, 81, 125/0.06; e, 63, 96/0.07. In order to prepare I, V was heated in moisture-free toluene with an equimolar quantity of $(C_2H_5)_2NCH_2CH_2OH$. Subsequent addition of toluene solution of HCl precipitated I-chloride. If one fails to obtain chloride crystals the toluene solution may be extracted with 10% HCl. The extract

CARD: 5/9

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COUNTRY : Czechoslovakia G-2
CATEGORY :
ABS. JOUR. : RZKhim., No. 20 1959, No. 71492
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : may be then rendered alkaline with a solution of NaHCO_3 . The base may be finally extracted with ether and transformed into a picrate. Listed below are % yield of I and m.p., °C of its picrate (from alcohol): a. 13, 113; b. 13, 99; c. 22, 83; d. -, -, chlorides yield 48%, m.p. 94° (from acetone-ether), e. -, -, chlorides yield 52%, m.p. 119° (from acetone-ether). $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CN}$ in toluene (b.p. 61-63°/14 mm) was reduced by the action of powdered Na and alcohol. $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}_2\text{NH}_2$ (VI) was thus obtained, 48% yield, b.p. 142-144°. The rate of reduction
CARD: 6/9

COUNTRY : Czechoslovakia
CATEGORY :

G-2

ABS. JOUR. : RZKhim., No. 20 1959, No.

71492

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : POCl_3 was distilled off and moisture-free toluene was added to the residue. The mixture was then again distilled. The yield of 2-chlorocinchonine (VII-acid) was 86%, m.p. 82° (not verified, from toluene). Into a solution of an alcoholate composed of 24 moles Na, and 50 ml n- $\text{C}_4\text{H}_9\text{OH}$, $\text{CH}_3\text{OCH}_2\text{CH}_2\text{OH}$ (X) or $\text{C}_2\text{H}_5\text{COCH}_2\text{CH}_2\text{OH}$ were added 7g of diethyl aminoethylamide-VII, the mixture was then heated for 2.5 hours, and the corresponding II was isolated. (X was synthesized from CH_3OH and ethylene oxide in the presence of conc. H_2SO_4 , b.p. $123-125^\circ$).

CARD: 8/9

COUNTRY : Czechoslovakia
CATEGORY :

G-2

ABE. JOUR. : RZKhia., No. 20 1959, No. 71492

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : Listed below are ^{the} substance, % yield, m.p.
OC (from petroleum ether), and chlorides
n.p., OC (from benzene-petroleum ether):
IIa. 82, 79, 138; b. 81, 83.5 (not verified),
95; c. 69, 62.5 (not verified), 94. If not
specified the melting points cited were cor-
rected. Determination of M.P. was done in a
Koffler block. Article X, see RZKhia,
1958, #18, 60921.

-- G. Braz

CARD: 9/9

26

KOPACOVA, L.; VRBA, C.; PIVNIK, J.; SKARDA, R.

Topical tolerance to local anesthetic effect of prolonged-action benzocaine solution behaving as a microcrystalline implant. Cesk. fysiол. 9 no.1:84-85 Ja 60.

1. Odd. farmakodynamiky a toxikologie farmaceuticke fak. MU. Ustav farmakologie a Ustav patologicke anatomie vet. fak. VSZL, Brno.
(ANESTHETICS LOCAL pharmacol.)

VRBA, C.; KOPAC, F.; BOROVSANSKY, A.; SOVA, J.

Certain pharmacological properties of local anesthetics from the diethylaminoacetanilide group. Cesk. fysiол. 9 no.11:98-99 Ja 60.

1. Ustav farmakologie vet. fak. VSZL. Ustav farmaceuticke chemie farmaceut. fak. MU, Brno.

(ANESTHETICS LOCAL pharmacol.)

VRBA, C.

SEKERA, A.; HRUBY, J.; JARUBKO, I.; KRAL, J.; VRBA, C.; LEDUSKA, J.

Local anesthetics. Basic esters of substituted carbamic acids [with summary in English]. Sbor. Chekh. khim. rab. 18 no. 6: 870-879 D '53.
(MLRA 7:6)

1. Department of Pharmaceutical Chemistry of the University, and
Pharmacological Department of the Veterinary School, Brno.
(Anesthetics) (Carbamic acid) (Esters)

VRBA, C., SEKERA, A., BOROVANSKY, A.

Vrba, C., Sekera, A., Borovansky, A. "Studies in local anesthetics III. Basic esters of monoalkylcarbamic acids. p. 591 CASOPIS PRO PESTOVANI MATEMATIKY. CZECHOSLOVAK MATHEMATICAL JOURNAL. Vol. 47, no. 4, Apr. 1953, Praha, Czechoslovakia.

SO: Monthly List of East European Accessions, LC., Vol. 3, No. 1, Jan. 1954, Uncl.

VRBA, O.

Czechoslovakia

CA: 47:12635

with J. LEBDUSKA and A. SEKERA

High Vet. School and Masaryk Univ., Brno, Czech.

"Local anesthetics. IV. Pharmacological evaluation of active basic esters of substituted carbamates."

Ceskoslov. farm. 1, 554-63 (1952); cf. C.A. 47, 12302e.

VRBA, C.,
SEKERA, A., Chem. Listy 45, 90 (1951)

VRBA, C.

A. SEKERA, Chem. Listy 44, 275-6, 1950

DOFEK, B.; VRBA, C.

Studies of local anesthetics. XXIII. Basic acetyl mesidine. Coll Cz
(EBAI 10:9)
Chem 25 no.6:1596-1601. Je '60.

1. Institut für pharmazeutische Chemie, Masaryk-Universität, und
Institut für Pharmakologie, tierärztliche Fakultät, Landwirtschaftliche
Hochschule, Brno.

(Local anesthesia) (Trimethylaniline) (Acetyl group)

VRBA, E.

TECHNOLOGY

Periodical: ZELEZNICAR. No. 12, Dec. 1958.

VRBA, E. Fulfilling and exceeding tasks in railroad electrification prescribed by the 11th Congress of the Communist Party of Czechoslovakia. p. 12.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.

VRBA, E.

Only conscientious work will prevent accidents caused by the disconnection of trains.

P. 148, (Zeleznicar) No. 6, June 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

VRBA, E.

Area railroad transportation hubs in the new organization of railroad management. p. 98.

ZELEZNICNI DOPRAVA A TECHNIKA. (Ministerstvo dopravy)
Praha, Czechoslovakia
Vol. 7, no. 4, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11.
Nov. 1959
Uncl.

VRBA, E.

We have not written in vain. p.88

ZELEZNICAR (Ministerstvo dopravy) Praha, Czechoslovakia, No. 4, Apr. 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July 1959. Uncl.

VRBA, E.

Looking forward to the 4th Congress of Trade-unions. p. 113.

ZELEZNICAR. (Ministerstvo dopravy) Praha, Czechoslovakia, No. 5, May 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 7, July 1959
UNCL

VRBA, E.

Observing time limits. p. 126.

ZELEZNICAR. (Ministerstvo dopravy) Praha, Czechoslovakia, No. 5, May 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 7, July 1959
UNCL

VRBA, E.

We must devote more care to the introduction of new technology. p. 195.

ZELEZNICNI DOPRAVA A TECHNIKA. (Ministerstvo dopravy)
Praha, Czechoslovakia
Vol. 7, no. 7, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11.
Nov. 1959
Uncl.

VRBA, E.

The High Tatras express their thanks. p. 234.

ZELEZNICAR. (Ministerstvo dopravy) Praha, Czechoslovakia. No. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

Uncl.

VRBA, E.

Machines which help men.

P. 180, (Zeleznicar) No. 7, July 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

VRBA, E.

In the footsteps of old rationalizers.

P. 198, (Zeleznicar) No. 8, Aug. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

VRBA, E.

"Railroad employees of Nove Zamky are expanding the heavy-tonnage hauling." p.240

ZELEZNICAR, (Ministertvo dopravy) Praha, Czechoslovakia No. 11, Nov. 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6, June 1959
Uncl.

VRBA, E.

"Experiences from mass meetings cannot be forgotten." p. 141.

ZELEZNICAR. (Ministerstvo dopravy). Praha, Czechoslovakia, No. 6, June 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

VRBA, E.

Technical and economic problems in the foreground. p. 172

ZELEZNICAR. Praha, Czechoslovakia. No. 7, July 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

VRBA, Eugen (Praga); VLASAK, Frantisek, dr. (Praga)

An interview with Comrade Dr. Frantisek Vlasak, the new minister of transportation of Czechoslovakia. Vasut 8 no.3:2 30Ap '58.

1. "Vasut" pragai tudositoja. (for Vrba). 2. Csehszlovak Köztársasag közlekedesurgyi minisztere (for Vlasak).

VRBA, E.

Do we observe technological processes? p. 177

ZELEZNICAR. Praha, Czechoslovakia. No. 7, July 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

VRPA, E.

The problems of design documentation.

P. 2. (ZELEZNICAR) (Praha, Czechoslovakia) No. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) IC Vol. 7, No. 5, 1958

VRBA, E.

The care of man; health care of railroad employees in Hungary.

p. 256 (Železnice. Vol. 5, nos. 1-6, 8; Jan.-June, Aug. 1955. No. 10, Oct. 1957.
Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

VRBA, E.

Books and press in the service of Czechoslovak transportation. Tr. from the Czech.

p. 285 (Kozlekedestudományi Szemle. Vol. 7, no. 7/8, July/Aug. 1957. Budapest, Hungary)

Monthly Index of East European Accessions (EPAI) LC. Vol. 7, no. 2, February 1958

VRBA, E.

"The most beautiful gift."

p. 322 (Zeleznicar) Vol. 7, no. 12, Dec. 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

VRBA. E.

"The Opening of the First Section of Electric Railroad Transportation in Slovakia."
p. 242, (Zeleznice, Vol. 3, no. 10, 1953, Praha)

SO: Monthly List of ^{East European} ~~Russian~~ ^{Accessions}, / ^{Vol. 3, No. 3} Library of Congress, March ¹⁹⁵⁴ ~~1953~~, Uncl.

VRBA, E.

For a higher level of railroad transportation. p. 250.
ZELEZNICE, Prague, Vol. 4, no. 10, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

VRBA, E.

From Sokol as far as Prague. p. 260.
ZELEZNICE, Prague, Vol. 4, no. 10, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

VRBA, E.

Red Pennants for outstanding economic results, p. 51. (Železnice, Praha, Vol. 4, no. 3, Mar. 1954)

SO: Monthly list of East European Accessions (EEAL), IC Vol 4, No. 6, June 1955, Uncl

VRBA, Eugen

High technical standard of Hungarian telecommunication. Cs spoje
9 no.3:18-19 Je '64.

VRBA, Eugen

Faithful to the legacy of the Slovak national uprising. Siln
doprava 12 no. 8:1 Ag '64.

VRBA, Eugen

Motor bus transportation in Hungary. Siln doprava 12 no.6/7:24-26
'64.

VRBA, Eugen

Regional Telecommunication Administration in Prague. Cs spoje
9 no. 2:12-13 Ap '64.

VRBA, Eugen

Green light for the construction of the broad-gauge railroad track Matovce - Haniska. Zel dop tech 12 no. 3:
70-71 '64.

1-22-40-05 SW 101-2/ZPA/S1-2 EPA(W) EWP(V)/EWT(M)/EWP(B) EWP(E) EWP(T)
 06-10-10/PJ-17/Feb-10 Z/0012/65/000/001/0025/0033
 ACCESSION NR: AP5007770

AUTHOR: Tyrolerova, P. (Member of silicate technology dept); Vrbacky, I.;
 Hanykyr, V. (Member of silicate technology dept)

TITLE: Effect of calcinating barium titanyl oxalate on the properties of $BaTiO_3$

SOURCE: Silikaty, no. 1, 1965, 25-33

TOPIC TAGS: barium titanyl oxalate, calcination, barium titanate, titanium
 oxalate, barium oxalate, sintered titanate

ABSTRACT: In order to study the effects of heat and rapidly rising temperatures on the properties of $BaTiO_3$, produced by pyrolysis of barium titanyl oxalate, $BaTiO(C_2O_4) \cdot 4H_2O$, many samples of the oxalate were placed in crucibles in furnaces heated 50C above the calcination temperature for three hours. After roasting at temperatures of 650, 750, 850, 950, 1050 and 1150C in silite laboratory furnaces, tests were made at temperatures increasing at the rate of 3C per minute and also at 10C/min. The product was a clean white powder without any discernible cry-

in a hydraulic press since 1954
Card 1/2

ACCESSION NR: AP5007770

which tended to decline in calcinates produced at higher temperatures. Six tablets from each grade were then sintered in a horizontal tube furnace with the temperature increasing by 600C per hour to 1325, 1350 and 1375C, where it was maintained for 15 and for 180 minutes. At the contact surfaces the tablets became slightly gray to yellow-gray and the exposed surfaces became gray to blue-gray. Then they were tested.

ASSOCIATION: Katedra technologie silikatu, VSCHT, Prague (Silicate technology
department, VSCHT)

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OTHER: 006

✓ Metabolic activity of the brain in relation to muscular
exercise. I. R. Vitha (Inst. Arteriologie, Berufskrank-
heiten, Prague) Physiol. Bohemoslov. 3: 173-174, 1964

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APPROVED FOR RELEASE: 09/01/2001

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SO: Monthly List of East European Accessions. (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.

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Czechoslovakia/Radiophysics - Superhigh Frequencies, I-11

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35440

Author: Vrba, Jan

Institution: None

Title: Critical Frequencies of Waveguides of Simplest Forms

Original

Periodical: Slaboprůdy obzor, 1956, 17, No 3, Priloha praxe, P9-P10; Czech

Abstract: None

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Prace na revolverovem soustruhu; [strucny prehled revolverovych soustruhu a navod k praci, urceny pro praxi a odborne skoleni] V Praze, Prace, 1950. 143 p. (Technicke prirucky Prace, sv. 36) [Turret lathe practice; a brief survey of turret lathes and a handbook for machine shop practice and training. illus., subject index]

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11/10/84
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chorob z povolani, Prague). *Pracovní Léčba* 8, 210-15
(1966).—Halogenosilanes, alkylhalogenosilanes, and alkoxysilanes show a considerable corrosive effect, both as liquids and fumes, affecting the respiratory tract, eyes, and skin and causing org. changes and changes of the blood picture. Polymers, i.e., silicon oils, are practically nontoxic and do not reveal any biol. effect, with the exception of the volatile $\text{Me}_2\text{SiOSiMe}_2$, which produces a slight irritation of the lungs, eyes, and skin. L. J. Litback

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Effect of work in preparation of silicon on health of workers.
Pracovní lek. 8 no.4:291-294 Aug 56.

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prof. Dr. J. Teisinger.

(SILICON, injurious effects,
on workers (Cz))

(OCCUPATIONAL DISEASES,
silicon-induced lesions (Cz))

Z/635/60/000/04/12/022

AUTHOR: Vrba, Jan, Engineer

TITLE: Wire Ball Bearings¹

PERIODICAL: Jemná Mechanika a Optika, 1960, No 4, pp 120-122

TEXT: The author discusses the advantages and application possibilities of ball bearings the tracks of which consist of four wires. Wire ball bearings are suitable in cases where a small profile of ball bearing is required at a large diameter of the ball race. Figure 1 shows the section of a ball bearing with four tracks. The four wires have a hardness of 450 to 500 kg/mm² according to Brinell, and are enclosed by metal rings (Figure 2). Such wire ball bearings are used in the production of precise optical instruments, the largest designs have a groove diameter of more than 6,000 mm and a loading capacity of several thousand kilograms. Figure 3 shows the constructional design of a ball bearing, depending upon the axial force (P), the radial force (Q), and the most unfavorable force (M). One ring has to be dismountable to make possible the assembly; Figure 4 shows the solution of this problem by extension of the inner screw ring. Two or more series of balls are arranged within the bearing in the case of heavy loads (Figure 5). In case of a prevalent axial load in one direction a track arrangement

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Wire Ball Bearings

Z/030/60/000/04/12/022

according to Figure 6 is possible. Bearings exposed to significant radial forces are equipped with an outer ring split at its radial surface; both parts of the ring are screwed together (Figure 7). Wire ball bearings are also applicable in straight-line transmission. Figure 8 shows the arrangement used in case of any type of spatially acting forces. The author underlines the required precision in machining the bearing parts and describes the methods of embedding wires into the rings. The wires are either free, or embedded in grooves (Figure 9), the advantages of these designs are mentioned. Then the article describes the assembly of wire ball bearings and the possible defects occurring, e.g. by deformations of wire, etc. The wire cross-section is shown in Figure 10; the relation between the width of the groove (b) and the diameter of the wire (d) depends on the bearing dimensions and its arrangement, and upon the load ($b : d = 1 : 3$ in case of a rolled groove, and $b : d = 1 : 2$ to $1 : 3$ in case of a rough grinded groove). Finally the article deals with constructional problems of the ball bearing base, with the assembly and the starting of wire ball bearings, with lubrication problems and with questions of packing. There are 10 diagrams and 3 East German references. ✓C

ASSOCIATION: Meopta - Praha (Meopta Plant, Prague)

SUBMITTED: January 6, 1960

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Protection of ground water. p. 255.

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Monthly List of East European Accession (EEAI), LC Vol. 9, no. 2,
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Uncl.

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Hydrogeological research in the German Democratic Republic. p. 552.

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No. 12, Dec. 1959.

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"Notes on the relation between the hydro-geological conditions and the techniques of extraction and distribution of mineral waters in the Podebrady Spa"

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Jemna mech opt 7 no.12:374-377 D '62.

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Problems of Czechoslovak hydrogeology. Geol pruzkum 6 no.7;
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Hydrogeologic conditions of shallow ground waters in the
area of the Elbe and Ohre confluence. Sbor geol ved 1:
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VRBA, J.

5000. These problems of transmission of video signals by a frequency-modulated wave are solved by the method of the present invention. Subsequently, it is found that the frequency-modulated u.h.f. links are compared with amplitude-modulated systems, it being found that the former are preferable for transmission of video signals between a studio and a transmitter, or between various television centres. Calculation of the spectrum of a f.m. wave is carried out assuming that a video signal is equivalent to a system of rectangular pulses having a rise time corresponding to the highest transmitted frequency and that the modulation of frequency by rectangular pulses may be represented by two sinusoidal generators. The generator of frequency F is switched on during mark periods, while the generator of frequency F_c is on during spaces. The bandwidth determined by this method is considerably less than that calculated by the standard procedure. The validity of the method is restricted, but its correctness for television signals is corroborated by some experiments on a pulse-modulated reflex electron and by a comparison with the exact solution.

VRGA, J.

CZECH

1. The purpose of the work is to develop a link for the transmission of video signals in the VHS format.

A detailed description of the link is given in the following. The link is a two-way system consisting of a transmitter and a receiver. The transmitter is a reflex klystron in which the modulating video signal is applied to the reflector. The modulation is linear within a bandwidth of 10 MHz. The receiver consists of a klystron-crystal diode mixer, a 75 MHz intermediate frequency amplifier and a detector, having a total bandwidth of 10 MHz. The output signal is a video signal in the VHS format. The link is capable of transmitting video signals at a rate of 30 frames per second. The link is capable of transmitting video signals at a rate of 30 frames per second. The link is capable of transmitting video signals at a rate of 30 frames per second.

1. The purpose of the work is to develop a link for the transmission of video signals in the VHS format.

VRBA, 2

CZECHOSLOVAKIA/Radio Physics - Application of Radiophysical Methods I-9

Abs Jour : Ref Zhur - Fizika, No 8, 1958, No 18775

Author : Nemecek Jan, Vrba Jan

Inst : Not Given

Title : DT11 Radio Relay Line for Transmission of Television

Orig Pub : Slaboproudy obzor, 1957, 18, No 12- 839-851

Abstract : Description of a radio relay line, developed in the Research Institute of Communication Engineering imeni Popov. The line operates in the six centimeter band. The transmitter employs a reflex klystron of two watts capacity. The length of the line is 80 km, the buildup time of the pulse is less than 65 millimicroseconds.

Card : 1/1

33

Microwave Measurements (Cont.)

CZECH/1747

part the theory necessary to facilitate an understanding of the text is explained. The author thanks leading personalities of the Výzkumný ústav pro sdělovací techniku A.S. Popova (A.S. Popov Research Institute for Information Technique) in Prague, the Ústav pro výzkum radiotechniky (Institute for Radiotechnical Research) in Opocínek, and Docent V. Tysl, Engineer, for their help in preparing the book. There are 117 references, of which 14 are Soviet, 18 Czech, 1 Slovak, 75 English, and 9 German.

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6-19-59

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"Interference of Certain Metabolites of Styrene, Whose Presence is Assumed, in the Polarographic Determination of Mandelic Acid in Urine."

Prague, Pracovni Lekarstvi, Vol 18, No 6 - 7, Aug 66, pp 265-266

Abstract [Authors' English summary modified]: During the polarographic determination of mandelic acid by the method of Bister and Wolf, an interference by styreneglycol was observed in 77% of the experiments, and acetophenone in 98%. Phenylglyoxal administered to rats is transformed to benzaldehyde positive substances; these interfere with polarography, although the original substance does not. The metabolism of styrene is discussed, and the possibility of finding a suitable analytical method for its study is evaluated. 1 Table, 4 Western, 2 Czech references. (Manuscript received 16 Jul 65).

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Hygiene and Epidemiology, Stredoceskeho Kraje), Prague, Director (Reditelka) Dr M. REJSKOVA; Chair of Hygiene (Katedra Hygieny) Head (Vedouci) Prof Dr P. MACUCH, and Chair of Pathological Physiology) Head (Vedouci) Docent Dr T. TRAVNICEK, Faculty of General Medicine, Charles University (Fakulta Vseobecneho Lekarstvi KU), Prague.

"APPROVED FOR RELEASE: 09/01/2001" CIA-RDP86-00513R001961210015-5"

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Prague, Pracovni Lekarstvi, Vol 18, No 6 - 7, Aug 66, pp 267-268

Abstract [Authors' English summary modified]: The effect of styrene, benzene, and toluene on glutathione in the liver of rats was investigated. Decrease of glutathione was found in experiments in vivo after 120 min following an s.c. injection of 0.2 ml of styrene, or benzene. Toluene was not active. Styrene poisoning does not induce an increase in oxidized glutathione. 1 Table, 11 Western, 1 Japanese reference. (Manuscript received 16 Jul 65).

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(INDUSTRIAL MEDICINE educ)

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